

SUB 7  
C1  
71.(New) A method according to Claim 70 wherein the under bump metallurgy layer comprises an adhesion layer on the input/output pad, and a conduction layer on the adhesion layer.

72.(New) A method according to Claim 71 wherein the adhesion layer comprises a titanium layer, and wherein the conduction layer comprises a copper layer.

A1  
cont  
73.(New) A method according to Claim 69 wherein the barrier layer comprises a nickel layer free of lead and an alloy layer including nickel and lead between the nickel layer free of lead and the solder structure.

74.(New) A method according to Claim 69 further comprising:  
forming a second input/output pad on the substrate;  
forming a second bonding structure on the second input/output pad, the second bonding structure including, a second barrier layer comprising nickel on the second input/output pad, and a gold layer on the barrier layer comprising nickel; and  
bonding a wire to the second bonding structure.

75.(New) A method according to Claim 69 further comprising:  
bonding a second substrate to the solder structure.

76.(New) A method according to Claim 69 further comprising:  
forming a protective insulating layer on the substrate and on portions of the input/output pad so that portions of the input/output pad are exposed through the protective insulating layer.

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